

Notice of Allowability

Application No.

10/773,529

Examiner

Nashaat T. Nashed, Ph. D.

Applicant(s)

CAHOON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment to the claims filed June 6, 2006.
2. ☒ The allowed claim(s) is/are 32 and 35-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 6/7/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I-IX. Claims 1-13 and 23-31, drawn to nucleic acid encoding the farnesyltransferases of SEQ ID NO's: 2, 4, 6, 8, 10, 12, 14, 16, and 18, respectively, vector and a host cell, transgenic plants and seeds, and method of transforming host cell and making the polypeptide classified in class 536, subclass 23.2, and class 800, subclass 295.
- X-XVII. Claim 14, drawn to farnesyltransferases of SEQ ID NO's: 2, 4, 6, 8, 10, 12, 14, 16, and 18, respectively, classified in class 435, subclass 193.
- XIX-XXVII. Claims 15-20, drawn to a method of selecting a nucleic acid sequence that affect the level of expression of the farnesyltransferases of SEQ ID NO's: 2, 4, 6, 8, 10, 12, 14, 16, and 18, respectively, classified in class 435, subclass 6.
- XXVIII-XXXVI. Claims 21-36, drawn to a method of obtaining a nucleic acid fragment encoding the farnesyltransferases of SEQ ID NO's: 2, 4, 6, 8, 10, 12, 14, 16, and 18, respectively, using PCR method, classified in class 435, subclass 91.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are independent chemical entities having different structure and function and would require separate searches in the patent and non-patent literature.

Inventions X-XVIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are independent chemical entities having different structure and function and would require separate searches in the patent and non-patent literature.

The nucleic acid sequences of invention I-IX and the farnesyltransferases of inventions X-XVIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different

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inventions are independent chemical entities having different structure and function and would require separate searches in the patent and non-patent literature.

Inventions I-IX and XIX-XXVII, respectively, are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the nucleic acid of inventions I-IX can be utilized in a recombinant method to make the corresponding farnesyltransferases.

Inventions I-IX and XXVIII-XXXVI, respectively, are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the different inventions are independent chemical entities having different structure and function and would require separate searches in the patent and non-patent literature.

The farnesyltransferase of inventions X-XVIII and the methods of inventions XIX-XXXVI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the farnesyltransferases of inventions X-XVIII are not utilized by the methods of inventions XIX-XXXVI.

Inventions XIX-XXXVI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different methods are independent methods utilizing different reagents and produce different products.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Emil M. Orozco on May 17, 2006 a provisional election was made without traverse to prosecute the invention of VI, claims 1-13 and 23-31 as they relate to the farnesyltransferases of SEQ ID NO: 12. Mr. Orozco filed an amendment on May 17, 2006 confirming the election of Invention VI.

The application has been amended as requested in the communications filed May 17, 2006 and June 6, 2006. Accordingly, new claims 32-44 have been entered,

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claims 1-31, 33, and 34 have been canceled, and claims 32, 38, 40, and 44 have been amended.

Claims 32, and 35-44 are pending and under consideration.

Claims 32, and 35-44 are allowed.

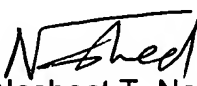
The following is an examiner's statement of reasons for allowance: The specification teach a nucleic acid fragment having the nucleic acid sequence of SEQ ID NO: 11 isolated from corn and encoding the beta-subunit of farnesyltransferases of SEQ ID NO: 12. Also, the specification teach the nucleic acid and amino acid sequences for the alpha-subunit from corn of SEQ ID NO: 1 and 2, respectively. In addition, the specification enables vectors and host cells as well as transgenic plants and seed comprising the nucleic acid encoding SEQ ID NO: 12. The prior art of record neither teach or suggest the nucleic acid or the amino acid sequence of SEQ ID NO: 12, and therefore, the claims are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashaat T. Nashed, Ph. D. whose telephone number is 571-272-0934. The examiner can normally be reached on MTWTF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen M. Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Nashaat T. Nashed, Ph. D.
Primary Examiner
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